Joint Non-Lethal Weapons Program

Briefing to Metropolitan Critical Infrastructure Exercise San Francisco, CA

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Purpose

Provide an overview of the Joint NLW Program

- *Review* JNLWP Foundation
- *Highlight* Operational Environment
- *Describe* DOD Non-Lethal Capabilities
- *Underscore* considerations for NLW employment

DoD NLW Definition

"Weapons that are explicitly designed and primarily employed so as to ***incapacitate personnel or materiel***, while ***minimizing fatalities***, permanent injury to personnel, and ***undesired damage*** to property and the environment."

Non-Lethal Weapons Core Capabilities

Counter Personnel

- Deny Access
- Clear Facilities
- Crowd Control
- Incapacitate

Counter Material

- Area Denial *air, land, sea*
- Disable / Neutralize Equipment & Facilities

Counter-Capability

- Facilities, Systems, and WMDs

JNLWP Foundation

National Defense Authorization Act for FY 96

"The Secretary of Defense shall assign centralized responsibility for development (and any other functional responsibility the Secretary considers appropriate) of nonlethal weapons technology to an existing office within the Office of the Secretary of Defense or to a military service as the executive agent."

Office of the Under Secretary of Defense (A&T), 22 March 1996 Memo

"The Commandant, US Marine Corps will serve as the Executive Agent (EA) for the NLW Program."

"The EA is responsible for program recommendations and for stimulating and coordinating NLW requirements."

DoD Directive 3000.3, dated 9 Jul 96

"Applies to all non-lethal weapon development and acquisition programs and the employment of fielded non-lethal weapons."

Today's Operational Environment

Conflicts characterized by:

- Complex/Congested Terrain
- Intermingled belligerents/innocents
- Asymmetric Threats
- Media Factor (CNN)

NLWs support:

- Managing escalation
- Minimizing Casualties/Damage
- Reducing unintended consequences
- Protecting the Force
- Affecting Perceptions

NLW Relevance Across the Spectrum of Conflict

NLWs allow the political & warfighting leadership critical options for conducting operations in the 21st century

MILITARY PRESENCE — **NLW CAPABILITIES** — **LETHAL FORCE**

Force Continuum

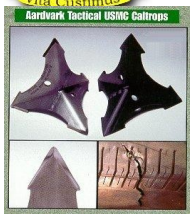
Target selected individuals

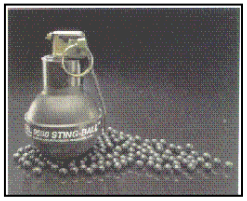
Clear facilities

Control group movements

Neutralize without Destroying

Fielded NLW Capabilities * (Predominately low-tech, close-in, tactical capability)





Nonlethal Munitions

- 12 Gauge Point & Area Rounds
- 12 Gauge Sabot Rounds (Outboard Disabl
- 40mm Point & Area Rounds
- Flash Bang Grenades
- Stingball Grenades
- 66mm Smoke & CS Grenades
- Paintball Rounds (OC)

Other Items

- 12 Gauge Shotguns / Lightweight Shotgun
- Individual, Mid-Size & Squad Riot Contro
  Agent (CS, OC, CR & CN) Dispensers
- Caltrops / Stinger Spike Strips
- Tasers (M26)
- Riot Control Baton

Support Equipment

Force Protection Equipment & Training

* Various versions have been deployed in Kosovo, Bosnia, Somalia, Operation

Individual Protective Equipment

In Modern Peacekeeping scenarios the soldier is required to maintain a highly visible and vulnerable position. The Non Lethal Capabilities Set is designed to provide the soldier with the means to avoid injury during civil confrontations.

Non-Ballistic Riot Face Shield

Non-Ballistic Riot Body Shield

Non-Ballistic Riot Shin Guards

Ballistic Face Shield

Ballistic Body Shield

Ballistic Shin Guards

Munitions

The largest part of the kit is devoted to providing the unit commander with a variety of non-lethal and non-destructive means for deterring hostile personnel and incapacitating their material

Stingball Grenade
Flash Bang Grenade

40mm Point Grenade
40mm NL Area Grenade

12 GA Shotgun
12 GA Launching Cup
12 GA Point and Area Rounds
12 GA Diversionary Round
12 GA Launching Cup Cartridge

Individual Enhancement Devices

M7 Individual Voice Amplification System

Individual High Intensity Light
High Intensity Light Kit
High Intensity Light for Shotgun

Riot Baton
Disposable Restraints
Individual RCA Disperser

Batteries and Replacement Lamps

12 GA Utility Pouch
12 GA Buttcuff
Diversionary Grenade Pouch
40mm Pouc

Mission Enhancement Devices

M37 Mid-sized RCA Disperser

Refill CR Riot Control Ag

Caltrop

Ground Mounted Bullhorn

Portable Bullhorn

High Intensity Searchlight

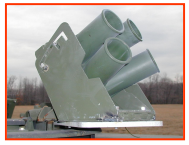
Training Devices

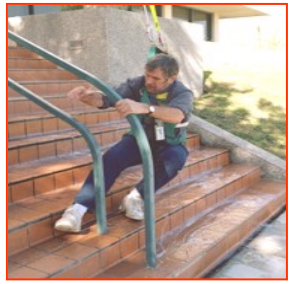
12 GA Dummy Round
L97E1 – 66mm Training Round
Inert Individual RCA disperser
Riot Training Suit
Riot g

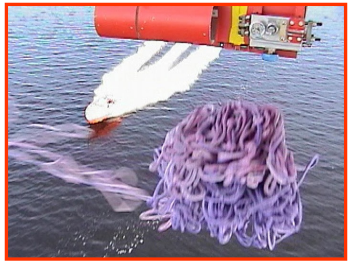
Developmental Efforts

2nd

2nd







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Within 1 year: 4 programs

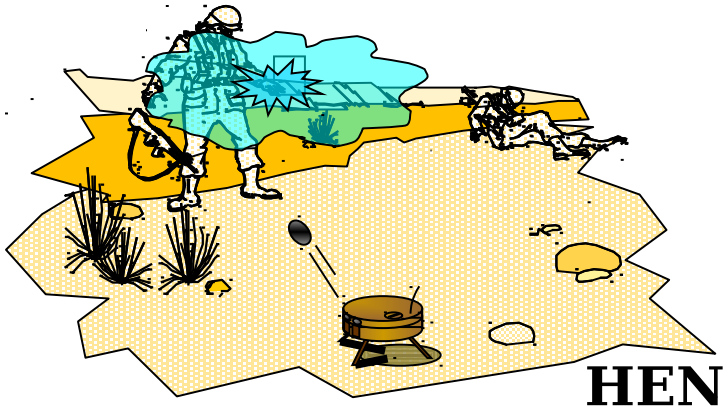
Within 1 to 5 years: 4 programs

Beyond 5 years ?

Current JNLW Acquisition Programs

- Mobility Denial System
  - Anti-Traction Material
- Clear A Space
  - Combined Acoustic/Optical Device
- Hand Emplaced NL Munition
  - Pre-emplaced; Payload TBD
    - Electric Stun under consideration

MDS



HENLM

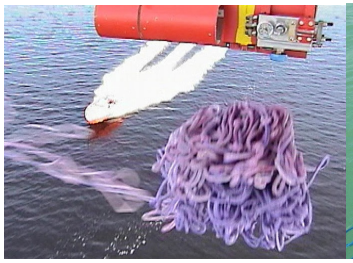
CAS

Pre-Acquisition Projects

- Objective Individual Combat Weapon NL Round
  - Riot Control Agent round for the Army rifle of the future
    - Precision airburst
  - Transitioning to Phase A program
    - Concept & Technology Demonstration

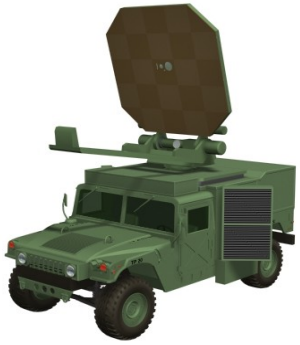
- 40mm MK 19 NL Munition
  - Army led Pre-Phase A program demonstration of rapid fire of NL blunt impaction munitions

- RGES Barrier
  - Coast Guard/Navy surface craft or helo launched small boat stopping capability Phase A program
  - Provides static barrier around ship or other waterside asset as a visible demarcation line, establishes zones, deters intrusions



Active Denial System (ADS) ACTD

System 0+
Field Laboratory Prototype
Kirtland AFB, NM



System 1
ACTD Field Prototype / Residual

System Description: The ADS is a non-lethal, speed-of-light, line-of-sight, direct fire, directed-energy suppression weapon approximately the size, shape, and weight of an ambulance-deployable medical support package and can be deployed or mounted on various platforms (e.g., vehicular, ship-borne, fixed site).

Operational Concept

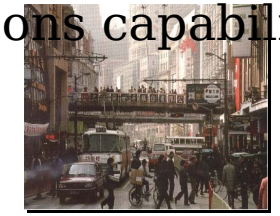
- Degrade the willingness of the belligerents to the point where they will be reluctant to enter the designated area
- Ultra Precise Targeting and Aimpoint
- ***Deny an area to personnel:*** Deny access to entry and exit points from buildings, facilities, structures, and airfields; provide protection against a point threat in both urban and open terrain
- ***Control crowds:*** Disperse a crowd beyond small arms range

Advanced Tactical Laser (ATL) ACTD

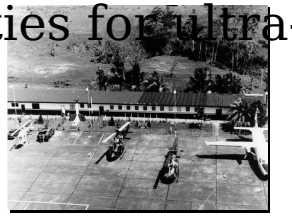
System Description: ATL is a modular roll-on/roll-off laser system that can be hosted on a number of current and future platforms including air, land and sea platforms. The laser system placed on an airborne platform provides surveillance and tactical laser weapons capabilities for ultra-precision strike.

Operational Concept

Vehicle Disable/Stop



Urban Operations



Infrastructure Disruption

- Covert Engagement at Safe Distance (Day/Night)
- All Aspect Engagement and Re-Targeting Capability
- Ultra Precise Targeting and Aimpoint - Minimize Collateral Damage
- Adjustable Delivered Energy - Effects based engagement (Annoy, Disrupt, Damage, Disable, Destroy)

Legal, Policy & Requirements Process

- Non-Lethal weapons undergo the same legal & treaty compliance reviews as lethal weapons
- DoD Non-Lethal Policy Directive (3000.3) has been sufficient for NLW activity to date
- We participate in the DoD Requirements Process (JMNS, JMAA, JROC, POM, IPL)

Human Effects Process

- For counter-personnel NLWs, both weapon effects and effectiveness must be fully assessed across the span of the human population
  - *New territory for DoD*
- We have established, with AFRL, Brooks AFB, a NLW Human Effects Center of Excellence to assist NLW program managers
- We have established an independent Human Effects Review Board to review individual program human effects analyses

NLWs Capabilities Enhance Military Assistance to Civil Authorities

- **Enhance management of escalation**
  - **More increments/options**
  - **Avoid/control infrastructure damage**
- **Reduce unintended consequences**
  - **Minimize non-combatant casualties**
  - **Minimize collateral damage**
- **Affect perceptions**
  - **Adversary**

Pax Custimus
Department of Defense
Non-Lethal Weapons
Vita Custimus

Questions